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Mr. Michael McAteer, WAM (5HSRL-6J)
U.S. Environmental Protection Agency, Region 5
77 West Jackson Boulevard
Chicago, IL 60604-3590

Subject: Monthly Progress Report No. 5
CH2M HILL/E&E Oversight of Remedial Action Activities
Enviro-Chem (ECC) Superfund Site, Zionsville, Indiana
WA No. 008-RXBF-0530, Contract No. 68-W6-0025

Dear Mr. McAteer:

Enclosed is a copy of Progress Report No. 5 for the April 1998 reporting period and the corresponding photographic log.

Please call me at (513) 762-7605 if you have any questions.

Sincerely,

CH2M HILL

Tim Harrison
Site Manager

CIN\PRO5

Enclosures

c: Stephen Nathan/PO/USEPA; 5HSM-5J (w/o enclosure)
Peggy Hendrixson/CO/USEPA; 5MCC-10J (w/o enclosure)
Ike Johnson/PM/MKE
Al Erickson/RTL/MKE
Dan Lynch/Environment & Ecology
Gail Gill/AA/MKE

ECC RA Oversight Progress Report No. 5 (May 1998)

CH2M HILL Remedial Action (RA) Oversight Observation

This is the fifth RA oversight progress report submitted by CH2M HILL for RA activities done at the Enviro-Chem (ECC) Superfund Site in Zionsville, Indiana. This progress report covers the period from May 1 through May 31, 1998.

Versar Inc., the ECC Trust's (Trust) prime remediation contractor, and several of their subcontractors performed field activities during the reporting period. Dan Lynch/Ecology and Environment, Inc. (CH2M HILL subcontractor) conducted full-time oversight at the ECC site on during this reporting period at the request of U.S. EPA.

Progress Made by Trust's Contractor This Reporting Period

The line items below list the status of a particular remediation task identified in the Trust's Project Schedule dated December 19, 1997. The schedule is significantly out of date but the Trust is waiting to resolve the "hot spot" issues at the southwest corner of the site before submitting a revised schedule.

- 1-31. Pre-Design Activities — These line items were all completed prior to this reporting period.
- 31-39. Pre-Mobilization Activities — All pre-mobilization activities were completed prior to this reporting period.
- 40-42. Mobilize Site — The construction facilities setup and site surveys were completed prior to this reporting period.
- 43. Construct Perimeter Roads — This item is in progress, but behind schedule. Roads have been "roughed in" but are not final based on specifications. This is not a critical path issue and has been delayed while the Trust address critical path issues.
- 44. Clean and Repair Erosion Ditches — This item was continued during this reporting period and is behind schedule. Revetment was added to the northern ditch area. This is not a critical path issue and has been delayed while the Trust addresses critical path issues.
- 45. Install Culvert System — This item was partially completed prior to this reporting period. No progress was made on this item during this period. The remainder of the culverts will be installed after this reporting period.
- 46. Perform Test Borings in the South Concrete Pad — Test borings were completed on the south concrete pad prior to this reporting period. A "hot spot" was noted as a result of these borings located in the southwest corner of the concrete pad. Five additional borings were completed in the area. Wells were installed in the two

borings that showed contamination (based on PID headspace readings) for collection of groundwater for treatability testing and for treatment of the hotspot. Groundwater in the two installed hot spot wells was treated by the Trust with Fenton's reagent. A third well was installed during this reporting period to monitor the hotspot. The wells were sampled during this period and contamination was still detected. The wells were treated a second time with peroxide. The wells will be sampled during the next reporting period to evaluate the effectiveness of the second treatment.

- 47-51. South Concrete Pad Area – These items were completed during this reporting period. The "ECC" sump was located and excavated. Base of the sump was about seven feet deep and grouting was not necessary. The well ECCW-12 in the sump was abandoned by grouting. The Trust's independent geotechnical review was completed and a safe excavation depth report was generated.
- 52-59. Treatment Systems – These items are all related to erection of the treatment process building that was completed prior to this reporting period.
- 60. Erect Four Tanks with Liners – The contractor completed assembly and testing of the four tanks (T1, T2, T3 and T4) and liners prior to this reporting period.
- 61. Set Equipment – All remaining major treatment process equipment was received and set prior to this reporting period.
- 62. Pipe – Most of the underground piping installation between the tanks and the process building was completed and tested prior to this reporting period. The piping for the mobile water treatment system was completed and the system was started up. Installation of the pipe rack between storage tanks #3 and #4 remains to be completed as well as most of the SVE system piping.
- 63. Wire – The wiring of the process building, tank power and control continued during this reporting period. The wiring of the process equipment will continue into the next reporting period.
- 64. SVE System Testing – System not yet complete and is behind schedule.
- 65. SVE Startup and Shakedown – System is not yet complete and is behind schedule.
- 66. SVE System Complete System – System is not complete.
- 67. WWT System Testing – Testing of the stationary wastewater treatment system was continued during this reporting period. Installation and shakedown of the mobile wastewater treatment system was completed this reporting period. Water was processed with both systems. Final startup testing has not been completed.
- 68. Prepare Surface Water and Sump Pumps for WWT – This activity was initiated during this reporting period and is expected to continue into the next reporting period.
- 69. WWT Start-Up and Shakedown – This activity was initiated prior to this reporting period and is expected to continue into the next reporting period.
- 70. Pumping and Treating of Poned Water – This activity was initiated prior to this

reporting period, continued through this period, and is expected to continue into the next period as necessary.

71. **Wastewater Storage and Treatment System Complete**— The system is near completion. Some instrument and control functions must still to be completed. The mobile WWT system is now operational.
72. Blank line.
73. **North Treatment Area Phase 1 (Existing Soils)**— Activities continue as described in items 74-76 below.
74. **Clear Area**— This activity was initiated prior to this reporting period and was completed during this period.
75. **Layout**— This activity was initiated prior to this reporting period and will continue until the SVE system is complete.
76. **Demolish and crush the building slabs**— The north area building slabs were demolished prior to this reporting period. The concrete was crushed during this reporting period.
77. **Air Monitoring (during pad crushing)** — This activity was completed during this reporting period.
78. **Stockpile Crushed Concrete and Subbase** — The concrete was stockpiled for use in the SVE trenches. The subbase material was not removed because of high PID air monitoring levels (>10 ppm sustained) in the work area. The Trust contractors did not have PPE for Level B operations so the activity was delayed. This activity will be completed during the next reporting period and expected to be done in Level B PPE.
- 79 –85 **Installation of North Area Native Soil SVE System** — These items were initiated late in this reporting period and will continue into the next period. The keyway was completed around the northern SVE area except for a small strip adjacent to the decontamination pad.
87. **South Concrete Pad Area**— Work is continuing as discussed in items 88-90 below.
88. **Clear area**— This activity was initiated prior to this reporting period.
89. **Install Well Points to Dewater Area**— This activity has not yet been initiated. This activity may not be required based on the low water volumes observed in a test pit that was installed in the pad area.
90. **Demolish South Concrete Pad and Crush**— This activity was completed during this period.
91. **Excavate and Stockpile Subbase** — The concrete was stockpiled for use in the SVE trenches. The subbase material was not removed because of high PID air monitoring levels (>10 ppm sustained) in the work area. The Trust contractors did not have PPE for Level B operations so the activity was delayed. This activity will be completed during the next reporting period and expected to be done in Level B

PPE.

128. Installation of Monitoring Wells by the Trustees— This activity was completed during this reporting.
141. Abandon Twelve wells by Trustees— This was completed during this reporting period.

Problems Resolved by the ECC Trust's Contractor

1. The ECC sump was located and excavated. It was determined to be about seven feet deep instead of the twelve feet reported. Grouting of the sump was deemed unnecessary by the Trust since there was no hydraulic connection to the subsurface.
2. Pilot borings for wells S3 and T9 in the Consent Decree design location indicated that no sand was present. An alternate location near the southwest corner of the site located sand and the wells were installed at this location.
3. Monitoring well S4 encountered more than twenty feet of sand and initially, only the top twenty feet of the sand zone was screened which was inconsistent with the requirements of the Consent Decree. The Trust installed a second well (S4D) was installed adjacent to S4 to screen the lower portion of the sand unit.

Problem Areas Remaining

1. During geotechnical drilling of the southern concrete pad area, the Trust discovered an area of high VOCs (based on PID readings of the soil using an OVM) that they did not anticipate. This area was not intended to be remediated by the Trust under the current remedial design. Five borings were completed to further investigate the area during this reporting period. Three of the borings showed no obvious contamination (based on PID headspace readings performed by Trust). The remaining two borings showed indications of contamination and sampling/treatment wells were installed.

During this reporting period the two potentially contaminated wells were treated using Fenton's reagent. The hot spot wells were sampled during this reporting period and contamination was still present though at much lower levels. The wells were treated again with peroxide and were resampled. The analytical results are not yet available. A permanent well was installed down-gradient of the hotspot. The well will be used for long-term sentinel monitoring.

2. During the demolition of the southern concrete pad, a small (<1 cu. ft.) quantity of red "paste-like" material was uncovered and was intermingled with the aggregate subgrade. Surface water in the area was also pink. The readings on the contractors OVM in the area were high (20-40 ppm) when this material was disturbed. Water samples indicated several solvents and phenols. The pink water was pumped into "frac" tanks and treated with peroxide. The air monitoring levels observed in the area were above the action levels for level C respiratory protection. The red solid-phase material was placed and sealed in a 55-gallons drum by the Trust.

Trust's Activities Planned

The following activities are expected to begin, or be completed, during the next reporting period based on Versar's current project schedule. The line items below list the status of specific remediation line items identified in the Trust's Project Schedule dated December 19, 1997.

- 43. Construct Perimeter Roads— Complete construction of the interior site access road.
- 44. Clean and Repair Erosion Ditches— Initiate and complete construction of site erosion ditches per the specifications.
- 45. Install Culvert System— Complete construction of the site culvert system.
- 61-64. Process Building Equipment— Continue setting SVE process equipment and ancillary plumbing and wiring of the process building. Functional testing of some equipment is also expected.
- 73-86. North Treatment Area Phase I (Existing Soil)— Continue the installation of the north treatment area (existing soil) SVE system. This includes clearing area, crushing concrete building slabs, excavating SVE trenches, adding stone aggregate to trenches, laying SVE piping in trenches, backfilling trenches, installing impermeable liner, and air monitoring. This was scheduled to start prior to this reporting period but was delayed.
- 87-93. South Concrete Pad Area— Begin excavation of southern concrete pad area and includes: clear area, install dewatering well points, demolish and crush concrete pad, excavate and stockpile subbase. These items were scheduled to start prior to this reporting period but were delayed.
- 94. Install East Zone Sheet Pile Cutoff Wall— This was scheduled to start prior to this reporting period but was delayed.
- 95-109, 114-117.

South Concrete Pad Area— These items are related to the later stages of the excavation of the south concrete pad. They are shown on the existing schedule as to begin prior to this reporting period but were delayed.

Other line items shown on the contractor schedule are expected to take place after the next reporting period and are therefore not included in this report.

ECC Trust's Schedule Status

Based on the schedule dated December 19, 1997, it appears that progress is about 8 to 10 weeks behind schedule at the end of the reporting period. The Trust's contractor has acknowledged schedule delays.

A revised schedule has not been presented to U.S. EPA, but is expected to be submitted by the Trust during the next reporting period.